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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,548	05/16/2006	Aloys Wobben	970054.501USPC	6151

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EXAMINER

LEYKIN, RITA

ART UNIT PAPER NUMBER

2837

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

↓ \* 5/

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/562,548		WOBBEN, ALOYS	
	<b>Examiner</b>		<b>Art Unit</b>	
	Rita Leykin		2837	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) *  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) *<br>Paper No(s)/Mail Date <u>5/16/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, limitations of claims 2, 3, 8, 9, 10, 11, 12, 14 including: a communication device, connection of clock to control means, plurality of storage devices, a power management program, a current meter/energy cell, recording unit installed in the vehicle, corresponding plug of the electrical supply network that has ground line, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 2, 3, 7, 8, 9, 11,12 are objected because there is no illustration of claimed limitations in the drawings. Correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Regarding claim 5, the phrase "in particular" in line 1, and claim 12 the phrase "for example" in line 6, 7 render these claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 5 is indefinite because it is not clear from the language of claim whether applicant is using an additional storage device or it is the same storage device that can be controllably discharged.
6. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Claim 9 is indefinite because method claim 9 is a dependent claim, wherein the base claims 1 and 8 are apparatus claims.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gore et al. US # 6,107,691 and Crews US # 3,904,947.

With respect to **claim 1** Gore et al. teach:

- An energy storage device installed in the vehicle presented as a fuel cell,  
(see Fig. 1);
- A plug connector for connection of to power grid, to feed current of energy storage device to power source, as in **claims 1, 12, 13 and 14**;

- On board inverter coupled to the fuel cell and to an off board inverter of utility grid, as in **claims 1, 5, 13 and 15**;
- A control means including automatic indicator setting for desired output levels of fuel cell charge/discharge, as in **claims 1, 5, 6**, (see Fig. 11 and col. 5, lines 39-46 and col. 9, lines 54-64);
- For multiple connections between power supply network and vehicle, as in **claim 8**, see Gore, Fig. 5;
- For meter to measure electric energy received from source and energy fed to the source, as in **claims 10 and 11**, see Gore Fig. 12 and col. 10, lines 1-24;
- 

Gore et al. do not teach detection of charge amount and a predetermined threshold value of remaining residual charge amount in the energy storage device. However, Crews discloses a vehicle, mounted battery charging system, wherein the vehicle battery is enabled to be recharged from ac outside power source outlets, (see Fig. 2). Wherein the low charge battery condition is detected, (see abstract). That is interpreted as detection of predetermined threshold value of the residual charge amount.

Crews also teaches, setting of time period for charging of the battery, (see col. 6, lines 16-47). Mean time Gore et al. discloses collection of discharged fuel cell power by utility grid and metering of the collected energy. That would suggests that setting of time

to discharge the power storage device to feed energy into electric power network can be provided by the user as well, as in **claims 1, 3, 4, 5**.

With respect to **claims 7, 14, 16 and 17**, contemporary data programming allows for many different power management programs and programs to calculate cost of purchased energy. Crews teaches in Fig. 3 logic supply voltage, that is interpreted as possibility to load the control system with an algorithm to control charge/discharge events at a pre-selected time by user. Crews teaching in combination with Gore et al. disclosed meters detecting the amount of purchase such data can be programmed. That would read on communication between control means and power network, as in **claim 2**.

Hence, it has been obvious to one of ordinary skills in the art, at the time invention was made to combine Crews teaching on charge/discharge energy storage device installed in the vehicle with Gore et al. teaching on utilizing multiple vehicle outlets installed in parking places to discharge the energy of the vehicles to the power network and provide vehicle owner and parking lot owner with mutual information regarding purchased/sold energy.

The reason is to use the advantageous electrical structure of hybrid or electric vehicle for providing energy to power grid.

***Allowable Subject Matter***

10. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter. The prior art made of record in the attached form PTO-892 considered to be pertinent to the submitted application.

However, none of the prior art teaches or suggests claimed limitations in combination with:

- Triggering of partial discharge of plurality of storage devices connected to the network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571)272-2800 ext. 33. The fax phone

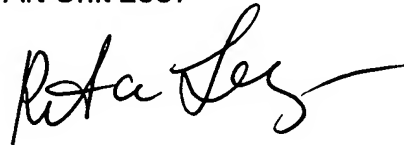


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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rita Leykin  
Primary Examiner  
Art Unit 2837

A handwritten signature in black ink, appearing to read 'Rita Leykin', with a long horizontal flourish extending to the right.

R.L.